

The University of Chicago

PUBLIC LIBRARY EXPENDITURES
IN CITIES OF OVER 100,000 POPULATION IN
RELATION TO MUNICIPAL EXPENDITURES
AND ECONOMIC ABILITY

A PART OF A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE LIBRARY
SCHOOL IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

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ROBERT H. DEILY

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ROBERT H. DEILY

GENERAL PURPOSE OF THE STUDY

THIS study is an analysis of the variations in public library support in the ninety-five largest cities in the United States. The cities chosen are those with populations in excess of 100,000 at the time of either the 1930 or the 1940 population census. The major purpose of the investigation is to determine the relationships between certain measurable financial and economic factors and the amount of library expenditures. In general, the data and methods used are quite quantitative and statistical. Stated in another way, the investigation attempts to answer the following questions: To what extent do expenditures for the public library vary in relation to (1) the expenditures for general municipal operation and (2) the economic ability of the various cities?

In order to accomplish this major objective with some degree of statistical

precision, it is necessary to undertake the following subordinate but important objectives: (1) to describe the existing inequalities in library service and to construct indices depicting the present levels of library expenditure and service; (2) to describe variations in the support of city governments and to construct indices which present variations in the support of the individual functions of municipalities; and (3) to develop an index which will measure the relative economic ability of cities to finance libraries and other public services. The development of indices for library service, for total municipal expenditures for general government, and for economic ability will make it possible to determine the statistical interrelationships between these three factors and their effects on library support.

Primarily, then, this investigation is a testing of the general assumption that variations in public library expenditures are caused more by variations in wealth than by other factors on which quantitative data are available. This assumption has been supported in studies of national and regional library development by

¹The essential portion of a dissertation submitted to the Graduate Library School of the University of Chicago in December, 1941, in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Wilson,² Purdy,³ and Joeckel.⁴ Similar conclusions have been reached in other fields, notably in education⁵ and public health.⁶ In the present study the focus will be shifted from a broad view of the entire public library field to a limited group of cities which may be subjected to accurate and sharply defined analysis. No claim is made for the final proof of the statement that library support is causally related to wealth or to other factors. This study undertakes only to show what the present relationships actually are and not to prove that they are predictable in any given situation.

PLAN OF PROCEDURE

Before any comparisons between library expenditures, municipal expenditures, and theoretical economic ability of a city can be made, it is necessary to determine the rank order numbers and index numbers for the ninety-five cities which are being investigated. The procedure is briefly detailed in the following paragraphs.

1. *Library service and library expenditures*.—Three objective measures of use and service are combined into an index

² Louis R. Wilson, *The Geography of Reading* (Chicago: American Library Association and University of Chicago Press, 1938), p. 416.

³ George F. Purdy, "Public Library Service in the Middle West" (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1936), p. 109.

⁴ Carleton B. Joeckel, *Library Service* (Staff Study No. 11, prepared for the Advisory Committee on Education [Washington: Government Printing Office, 1938]), p. 77.

⁵ Clarence Heer, *Federal Aid and the Tax Problem* (Staff Study No. 4, prepared for the Advisory Committee on Education [Washington: Government Printing Office, 1939]), pp. 1-4.

⁶ U.S. Interdepartmental Committee To Coordinate Health and Welfare Activities, *The Need for a National Health Program* (report of the Technical Committee on Medical Care, 1938 [Washington: Government Printing Office, 1939]), pp. 26-29.

of library service. An index of library support is also constructed from the per capita expenditures by the libraries. The three criteria of library service available, namely, (a) the number of volumes owned per capita, (b) the percentage of the population registered as borrowers, and (c) the circulation of library books per capita, are intercorrelated, and then correlated singly and as a group with the rank order arrangement of cities in library support.

2. *Municipal expenditures*.—Under this heading are developed (a) the index of municipal expenditure and (b) the construction of correlation tables which depict relationships between both the amount and percentage of expenditure for the public library and the amounts and percentages expended for other municipal activities, such as education, recreation, the police department, and general government. The findings test the accuracy of the hypothesis that the city which spends most on its general municipal activities, both combined and for single functions, also spends most for the library.

3. *Economic ability of municipalities*.—After the library expenditures and the expenditures for the other functions of municipal government have been investigated, a study of the potential economic ability of cities and its relation to library support is logically in order. The criteria of greatest validity in determining economic ability for municipalities are used. The nine measures of ability used in constructing the economic ability index are: (a) per capita true valuation of real and personal property, (b) retail sales per capita, (c) number of income tax returns per 1,000 population, (d) per capita bank deposits, (e) post-office receipts per capita, (f) circulation of twelve national magazines, (g) per capita effective buy-

ing power, (*h*) per capita wholesale sales volume, (*i*) number of residential telephones per 100 population.

The index of economic ability developed here is believed to be the first effort in this direction for municipalities, although students of education have already analyzed the relative and concrete ability of school districts, counties, and states to support public school systems.⁷

4. *Economic ability, municipal expenditure, and library expenditure.*—Here are synthesized the findings obtained from the three indices previously developed. The relationship between economic ability and municipal expenditures is used to determine the spread between actual and potential support. The coefficient of correlation between the municipal expenditure index and the index of library expenditure is used to show the relation between present general municipal support and library support. Finally, the coefficient of correlation between library support and economic ability is used to

show the relationship between actual library support and potential economic ability. The relationships discovered from the statistical manipulation of the various data are then interpreted.

COMPARISON OF LIBRARY EXPENDITURES, MUNICIPAL EXPENDITURES, AND ECONOMIC ABILITY

Stated more concretely than in section 4 above, this major portion of the study will investigate the following assumptions: (1) that a city which has higher than average economic ability will also rank above average in total municipal expenditures and in expenditures for the library; (2) that a city with a higher than average municipal expenditure index number will have above average index numbers for economic ability and library expenditures; and (3) that a city which has an above average library expenditure index number will have higher than average index numbers for municipal expenditures and economic ability. The subordinate objectives are to determine the separate relationships (1) between economic ability and municipal expenditures and (2) between economic ability and library expenditures.

The coefficient of correlation between economic ability and municipal expenditures will indicate the spread between potential and actual support. The coefficient of correlation between economic ability and library expenditures will show the relation between economic ability and the expenditure for one function of municipal government. The coefficient of correlation between library expenditures and total municipal expenditures is also presented in Table 1 to show the actual relationship, as contrasted with the correlations of total municipal and library expenditures and a theoretic-

⁷ S. C. Oliver, *A Survey of the Measures of the Ability of School Districts to Support Schools* (Ph.D. dissertation, Columbia University, 1933 [Springfield, Mo., 1932]); F. G. Cornell, *A Measure of Tax-paying Ability of Local School Administrative Units* (New York: Bureau of Publications, Teachers College, Columbia University, 1936); L. L. Chism, *The Economic Ability of the States To Finance Public Schools* (New York: Bureau of Publications, Teachers College, Columbia University, 1936); Mabel Newcomer, *An Index of the Taxpaying Ability of State and Local Governments* (New York: Bureau of Publications, Teachers College, Columbia University, 1935); P. R. Mort and E. S. Lawler, *Principles and Methods of Distributing Federal Aid for Education* (The Advisory Committee on Education, Staff Study No. 5 [Washington: Government Printing Office, 1939]); P. R. Mort, *Federal Support for Public Education* (New York: Bureau of Publications, Teachers College, Columbia University, 1936); J. K. Norton and M. A. Norton, *Wealth, Children and Education* (2d ed.; New York: Bureau of Publications, Teachers College, Columbia University, 1938); W. L. Miller, "The Relative Ability of the States To Finance Public Education" (unpublished Ph.D. dissertation, University of Chicago, 1940).

cal measure of economic ability. These three indices all support the statistical probability that if a city is above or below average on any one of the three financial measures, it will be correspondingly above or below average on the two remaining measures. The cities which do not conform to this assumption will be investigated under the separate categories in which they fall.

Correlations between library expenditures, total municipal expenditures, and economic ability.—Here are presented the broad statistical relationships between

perfect system of municipal taxation a perfect correlation should exist between economic ability and municipal expenditures. This means, in general terms, that unless outside financial assistance is brought to the municipality, the city with the highest per capita economic ability is able, theoretically, to make the highest per capita municipal expenditures, if the need exists for such expenditures. It is for this basic reason that cities with low economic ability have requested state and federal aid to maintain adequate financial support for those

TABLE 1
RANK ORDER CORRELATIONS BETWEEN LIBRARY EXPENDITURES,
MUNICIPAL EXPENDITURES, AND ECONOMIC ABILITY, 1937

Measure	Library Expenditures	School Expenditures	Municipal Expenditures	Economic Ability
Library expenditures.....		$+.694 \pm .06$	$+.669 \pm .06$	$+.378 \pm .09$
School expenditures.....	$+.694 \pm .06$		$+.739 \pm .05$	$+.357 \pm .09$
Municipal expenditures....	$+.669 \pm .06$	$+.739 \pm .05$		$+.348 \pm .09$
Economic ability.....	$+.378 \pm .09$	$+.357 \pm .09$	$+.348 \pm .09$	

the three financial measures employed in the study. A more detailed investigation of the wider variations in individual cities will be undertaken later. Table 1 lists the coefficients of correlation between the ninety-five cities in the three indices constructed. The coefficients of correlation between expenditures for schools and expenditures for libraries, expenditures for all municipal functions, and economic ability are also entered in the table as an illustration of how a second educational institution stands in relation to the same three measures. The table shows the statistical closeness of agreement between one measure and all the other measures and hence the extent of relationship between them. The individual relationships are discussed separately in the following sections.

Municipal expenditures and economic ability.—It is axiomatic that under a per-

functions which are of general interest to the entire country.

The coefficient of correlation between the rank order numbers of the ninety-five cities of over 100,000 population in municipal expenditures and economic ability is $+.348$ with a standard error of $\pm .09$. The coefficient is statistically significant, and indicates a slight positive relationship between economic ability and municipal expenditures.

Library expenditures and economic ability.—The findings summarized in Table 1 show that the correlation between economic ability and total municipal expenditures, library expenditures and expenditures for schools are all about the same: $+.348$, $+.378$, and $+.357$. These coefficients indicate that the separate municipal agencies of a permissive nature have approximately the same relationship to theoretical economic ability

as has the composite municipal operating expenditure figure. Proof is thus advanced that schools and libraries do not fare any worse, relatively, than do the essential functions of fire and police protection and sanitation.

Library expenditures and municipal expenditures.—The coefficient of correlation between library and municipal expenditures, $+.669$ (with a standard error of $\pm .06$), is cited here to show that, although the agreement between theoretical economic ability and library expenditure is positive and significant ($+.378$), the coefficient between actual municipal expenditures and library expenditures is statistically much higher ($+.669$). This simply means that there is a closer relationship between library support and municipal expenditures than there is between library expenditures and theoretical economic ability. Expenditures for schools correlate higher with municipal expenditures ($+.739$) than do library expenditures with municipal expenditures. This means, considering the cities investigated as entities, that there is a tendency for cities which are high in general municipal expenditures to be higher in expenditures for schools than in expenditures for libraries.

Summary.—Translating these statistics into the terminology of the man in the street, one might say that cities have standards of living which do not vary greatly for individual items of expenditure. If a city spends a large amount for all government, it is quite likely to spend proportionately high amounts for schools and libraries. Apparently this general standard of expenditure is more important in determining the amount of library (and also total and school) expenditures than is the theoretical ability of the population to support government.

Because, in the last analysis, it is the

wide extremes between financially able cities and cities with low economic ability which have brought into existence the serious inequalities throughout the nation in expenditures for functions of municipal government, an investigation of the index number ranges of the four measures studied is relevant at this point. The ranges between the highest and lowest index numbers for the measures investigated are shown in Table 2.

TABLE 2
INDEX NUMBER RANGE OF CITIES FOR
THE FOUR MEASURES, 1937

MEASURE	INDEX NUMBERS	
	Range	Ratio
Economic ability.	211-55	3.8:1
Municipal expenditures. . . .	204-46	4.4:1
School expenditures.	160-38	4.4:1
Library expenditures.	299-22	13.6:1

The fact which stands out in Table 2 is the much greater variation which occurs in library expenditures than in other measures. It appears that library expenditures vary much more than is warranted by the variations found in total expenditures, in school expenditures, or in economic ability. One cause for this situation is that library service in a number of cities is rudimentary; another reason is that cities with low total expenditures find it difficult to allot even proportionate amounts for libraries.

PATTERNS OF CITIES IN MEASURES OF LIBRARY EXPENDITURES, MUNICIPAL EXPENDITURES, AND ECONOMIC ABILITY

In this section of the study attention is centered on the relation between library expenditures, municipal expenditures, and economic ability considered together, as contrasted with the correlations between the individual measures in

the preceding section. Here the investigation will test the hypothesis that a city which is above or below average in one index number will also be above or below average in both remaining measures.

Table 3 presents both the rank order and index numbers for the ninety-five cities on the four measures studied. The numbers for library service are included for convenient comparisons with the other rank order and index numbers but are not discussed in the text. In the discussion which follows, index numbers for the various cities are used instead of rank order numbers. The index numbers are used because they are a refinement of the rank order numbers. Both sets of numbers are given in the table for comparative purposes.

Patterns of the cities.—The ninety-five cities fall into eight different classifications. It will be seen that these categories comprise all possible combinations of agreement or disagreement in the three measures of total expenditures, library expenditures, and economic ability. The different patterns, with the number of cities included in each, are as follows:

1. Cities with all index numbers above average (23).
2. Cities with all index numbers below average (28).
3. Cities above average in library expenditures and below average in municipal expenditures and economic ability (10).
4. Cities below average in library expenditures and above average in municipal expenditures and economic ability (3).
5. Cities above average in library expenditures and economic ability and below average in municipal expenditures (6).
6. Cities below average in library expenditures and economic ability and above average in municipal expenditures (5).
7. Cities above average in library expenditures and municipal expenditures, and below average in economic ability (10).
8. Cities below average in library expenditures and municipal expenditures and above average in economic ability (10).

Fifty-one of the ninety-five cities are included in Patterns 1 and 2. These cities are either above average on all three measures or else below average on the three measures. Consequently there remain forty-four cities in which one measure diverges from the other two measures. Therefore the hypothesis that a city above or below average in one measure will be above or below average in the other measures is true in only 54 per cent of the cities investigated. Six other cities diverge so very slightly (six index numbers or less) on one measure that for all practical purposes they may be counted as conforming to the pattern in all three measures.⁸ The addition of these cities would bring the number which conform throughout up to fifty-seven, or exactly 60 per cent of the cities studied. It is the six patterns comprising forty-four cities which have divergent index numbers that deserve far greater detailed investigation than can be attempted in this study.

Each of the eight categories of cities will be discussed in the remaining portions of this article. Tables listing the cities in alphabetical order for each group with their index numbers are presented for convenient analysis. From these tables the interpretations of the main characteristics of each group will be derived.

Pattern 1: cities above average.—Table 4 lists the twenty-three cities in the above average group. There is little to explain about this group; the results are what one might expect. The first major finding is that no southern city has a position here. Six cities are in New England, seven in the Middle Atlantic group, six on the Pacific Coast, three in the North Central section, and one in the Rocky Mountain group.

⁸ The cities are: Buffalo, Detroit, Indianapolis, Kansas City (Mo.), Milwaukee, and Worcester.

PUBLIC LIBRARY EXPENDITURES IN CITIES

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TABLE 3*

RANK ORDER AND INDEX NUMBERS FOR THE NINETY-FIVE CITIES OF OVER 100,000
POPULATION IN LIBRARY SERVICE, LIBRARY EXPENDITURES, MUNICIPAL
EXPENDITURES, AND ECONOMIC ABILITY, 1937

CITY	RANK ORDER NUMBERS				INDEX NUMBERS			
	Library Service	Library Expendi- ture	Municipal Expendi- ture	Economic Ability	Library Service	Library Expendi- ture	Municipal Expendi- ture	Economic Ability
Akron.....	62	53	54	67	80	94	80	85
Albany.....	28	25	27	3	119	127	125	159
Atlanta.....	86	81	77	19	53	47	67	120
Baltimore.....	78	56	34	61	68	92	110	90
Birmingham.....	82	84	92	91	61	42	49	66
Boston.....	14	2	1	2	134	252	204	175
Bridgeport.....	4	7	33	58	153	162	111	90
Buffalo.....	13	14	7	47	134	138	171	98
Cambridge.....	21	37	12	33	129	113	145	106
Camden.....	92	75	43	84	40	52	97	75
Canton.....	89	90	73	70	49	36	67	84
Charlotte.....	71	93	†	40	74	28	†	102
Chattanooga.....	57	89	88	87	88	37	55	74
Chicago.....	85	64	25	21	57	73	126	117
Cincinnati.....	11	11	22	9	135	147	130	128
Cleveland.....	2	1	19	30	181	299	135	109
Columbus.....	44	74	79	44	110	54	64	99
Dallas.....	73	87	86	5	72	39	55	133
Dayton.....	47	26	55	50	107	126	77	96
Denver.....	49	35	26	26	106	116	125	110
Des Moines.....	17	55	68	23	131	93	69	112
Detroit.....	84	34	23	56	57	116	128	92
Duluth.....	32	29	49	48	116	123	87	97
El Paso.....	90	77	91	85	48	50	51	75
Elizabeth.....	39	28	39	66	112	125	100	87
Erie.....	53	62	56	83	103	81	76	76
Evansville.....	54	58	70	77	100	92	69	81
Fall River.....	56	70	41	95	92	58	98	55
Flint.....	6	36	47	65	143	115	87	87
Fort Wayne.....	7	32	87	59	139	121	55	90
Fort Worth.....	64	85	82	49	80	41	63	97
Gary.....	40	33	76	94	111	120	67	60
Grand Rapids.....	23	27	63	57	127	125	73	91
Hartford.....	20	22	17	8	129	129	140	128
Houston.....	88	91	71	52	51	31	68	96
Indianapolis.....	8	17	45	31	137	135	94	108
Jacksonville.....	72	67	69	82	73	67	69	78
Jersey City.....	38	16	6	78	113	137	187	80
Kansas City, Kan..	67	83	89	90	76	44	54	68
Kansas City, Mo..	18	45	44	4	130	105	97	142
Knoxville.....	76	73	72	76	69	56	68	81
Long Beach.....	26	19	42	63	123	132	98	88
Los Angeles.....	47	44	20	25	107	107	133	110
Louisville.....	75	65	51	69	70	70	83	84
Lowell.....	66	78	29	93	78	49	121	61

* Sources: Tables 6, 9, 20, 28, and 31 of the unpublished dissertation.

† Data are not available.

TABLE 3*—Continued

CITY	RANK ORDER NUMBERS				INDEX NUMBERS			
	Library Service	Library Expenditure	Municipal Expenditure	Economic Ability	Library Service	Library Expenditure	Municipal Expenditure	Economic Ability
Lynn.....	25	23	21	62	123	128	133	89
Memphis.....	67	69	93	54	77	59	46	93
Miami.....	95	95	66	55	25	22	71	93
Milwaukee.....	49	51	11	46	106	97	149	98
Minneapolis.....	12	9	14	14	135	156	142	123
Nashville.....	87	86	85	41	52	40	57	100
New Bedford.....	24	52	32	92	125	97	113	64
New Haven.....	33	31	30	22	116	121	115	112
New Orleans.....	93	94	58	89	39	23	75	72
New York.....	77	49	2	17	68	101	202	120
Newark.....	43	4	3	24	110	108	202	111
Norfolk.....	81	82	74	79	63	45	67	79
Oakland.....	34	13	38	32	115	141	100	107
Oklahoma City.....	51	80	84	43	105	48	59	99
Omaha.....	74	79	80	18	71	49	64	120
Paterson.....	58	61	46	81	85	88	91	78
Peoria.....	9	42	52	35	137	108	83	104
Philadelphia.....	94	72	35	38	36	56	105	103
Pittsburgh.....	16	12	15	6	132	144	142	131
Portland.....	3	20	37	12	153	130	102	124
Providence.....	5	6	24	7	151	164	127	129
Reading.....	60	66	60	72	83	68	74	81
Richmond.....	69	71	48	29	76	58	87	109
Rochester.....	42	5	4	27	111	187	192	110
Sacramento.....	45	48	†	13	108	102	†	123
Saint Louis.....	70	60	36	20	75	90	104	117
Saint Paul.....	50	41	61	36	105	109	74	104
Salt Lake City.....	30	56	62	45	118	93	73	98
San Antonio.....	91	88	90	88	43	37	52	73
San Diego.....	41	50	57	73	111	99	76	81
San Francisco.....	59	40	16	1	84	109	141	211
Scranton.....	79	76	64	80	65	52	72	79
Seattle.....	15	21	31	15	133	130	114	122
Somerville.....	55	15	13	86	93	138	142	75
South Bend.....	27	18	81	74	122	133	63	81
Spokane.....	19	42	67	42	130	108	71	100
Springfield.....	1	3	10	28	232	232	153	110
Syracuse.....	52	47	9	37	104	103	155	104
Tacoma.....	22	46	59	75	127	105	74	81
Tampa.....	83	92	78	68	60	29	65	85
Toledo.....	29	8	50	51	118	161	83	96
Trenton.....	36	30	40	64	114	123	100	88
Tulsa.....	37	68	83	34	114	65	61	105
Utica.....	65	24	28	60	79	128	121	90
Washington.....	63	38	18	10	80	112	136	127
Wichita.....	10	59	75	39	136	91	67	103
Wilmington.....	35	39	65	16	115	111	71	121
Worcester.....	31	10	8	53	117	148	157	95
Yonkers.....	61	63	5	71	83	79	187	84
Youngstown.....	80	53	53	11	65	94	82	126

Second, a survey of the names of the cities leads to the broad generalization that they are among the better large cities of the country in which to live. Generally, wages are high, schools and libraries are good, parks and recreational facilities are provided, and ample police

TABLE 4*

CITIES ABOVE AVERAGE IN LIBRARY EXPENDITURES, MUNICIPAL EXPENDITURES, AND ECONOMIC ABILITY, 1937*

Name of City	Library Expenditures	Municipal Expenditures	Economic Ability
Albany.....	127	125	159
Boston.....	252	204	175
Cambridge.....	113	145	106
Cincinnati.....	147	130	128
Cleveland.....	299	135	109
Denver.....	116	125	110
Hartford.....	129	140	128
Los Angeles.....	107	133	110
Minneapolis.....	156	142	123
New Haven.....	121	115	112
New York City...	101	202	120
Newark.....	198	202	111
Oakland.....	141	100	107
Pittsburgh.....	144	142	131
Portland.....	130	102	124
Providence.....	164	127	129
Rochester.....	187	192	110
Sacramento.....	102	†	125
San Francisco....	109	141	211
Seattle.....	130	114	122
Springfield.....	232	153	110
Syracuse.....	103	155	104
Washington.....	112	136	127
Group average..	149	144	126

* Source: Table 3.

† This item was not available.

protection is afforded. It is admitted that many municipal services could be greatly improved, but in comparison with the cities in the following categories little criticism of these cities can be advanced.

Third, these cities are generally higher in total and library expenditures than in economic ability. In ten of the cities the library expenditure index numbers exceed the other two numbers, in ten the

municipal expenditure number is highest, and in only three is the economic ability number higher than either the library expenditure number or the municipal expenditure number. The average library index number for the group is slightly higher than the average for municipal expenditures and considerably higher than the average for economic ability.

Finally, as a fourth point, seven of these twenty-three cities (Boston, Cleveland, Los Angeles, New York City, Pittsburgh, San Francisco, and Washington) have populations which exceed 500,000. These seven comprise more than half the thirteen cities in this population group. Moreover, to name these seven cities is (with one probable exception) to name outstanding public library systems.

Pattern 2: cities below average.—

Twenty-eight cities are below the average for the ninety-five cities of over 100,000 population in the United States in library expenditures, municipal expenditures, and economic ability. These twenty-eight cities are listed in Table 5. In direct contrast with the group of twenty-three cities which are above average on all three measures and which listed no southern city, this category contains the names of fourteen of the southern cities included in the study. In other words, 50 per cent of the cities which are below average on every measure are southern cities.

The other cities are located as follows: six in the Middle West, five in the Middle Atlantic states, and one each in New England, the Mountain states, and the Pacific Coast.

However, a most important, but infrequently recognized, finding for this group of cities is that cities which rank below average in economic ability are very likely to rank lower in municipal expend-

itures, and still lower in library expenditures. Eighteen of the twenty-eight cities, twelve of them in the South, illustrate this tendency.

As an example, Chattanooga has index numbers of 74 in economic ability, 55 in

TABLE 5*

CITIES BELOW AVERAGE IN LIBRARY EXPENDITURES, MUNICIPAL EXPENDITURES, AND ECONOMIC ABILITY, 1937

City	Library Expenditures	Municipal Expenditures	Economic Ability
Akron.....	94	80	85
Birmingham.....	42	49	66
Camden.....	52	97	75
Canton.....	36	67	84
Chattanooga.....	37	55	74
Columbus.....	54	64	99
El Paso.....	50	51	75
Erie.....	81	76	76
Evansville.....	92	69	81
Fall River.....	58	98	55
Fort Worth.....	41	63	97
Houston.....	31	68	96
Jacksonville.....	67	69	78
Kansas City, Kan.....	44	54	68
Knoxville.....	56	68	81
Louisville.....	70	83	84
Memphis.....	59	46	93
Miami.....	22	71	93
New Orleans.....	23	75	72
Norfolk.....	45	67	79
Oklahoma City.....	48	59	99
Paterson.....	88	91	78
Reading.....	68	74	81
Salt Lake City.....	93	73	98
San Antonio.....	37	52	73
San Diego.....	99	76	81
Scranton.....	52	72	79
Tampa.....	29	65	85
Group average..	56	69	82

* Source: Table 3.

municipal expenditures, and 37 in library expenditures. Norfolk has index numbers of 79 in economic ability, 67 in municipal expenditures, and 45 in library expenditures. These facts support the theory that when economic ability is below average, taxes, and therefore municipal expenditures, tend to be still further below average. Because the essen-

tial functions of municipal government have first claim on the budget-makers and must be financed to a fairly adequate degree, it is obvious that relatively little money will be left to support functions such as libraries, recreational agencies, and even the public schools. Two cities—Memphis and Salt Lake City—rank highest in economic ability, second highest in library expenditures, and lowest in municipal expenditures and do not support the hypothesis advanced above.

Twenty of the twenty-eight cities in this pattern have now been accounted for, thus leaving eight cities for further analysis. Four cities—Camden, Fall River, New Orleans, and Paterson—have highest index numbers in municipal expenditures; and four—Akron, Erie, Evansville, and San Diego—have highest index numbers in library expenditures. Three of these cities—Camden, Fall River, and Paterson—which rank highest in municipal expenditures were in 1937 highly industrialized but depression ridden. Compared with Paterson's index numbers for economic ability (78), municipal expenditures (91), library expenditures (88), and library service (85), Camden shows comparable index numbers of 75, 97, 52, and 40. With economic ability numbers practically alike, and with Camden making a greater total municipal effort, the library index numbers reveal an unsatisfactory situation. A separate survey of the Camden library system and the attitude of the city toward the library is apparently needed. Fall River has the lowest economic ability index number (55) of the ninety-five cities investigated. Because the municipal expenditure index is 98, the hypothesis may well be that this city is struggling to maintain its essential municipal functions on a level incompatible with the present economic ability of the city.

In the group of cities which have higher index numbers for library expenditures than for economic ability or municipal expenditures in general, obvious explanations can be made for two of the four cities. Akron receives its funds from a centrally collected, locally shared intangibles tax, and Erie is a school-district library which receives its appropriations from the board of education and not from the city government. Explanations for the library index numbers in Evansville and San Diego are not readily forthcoming and probably must be sought in special local conditions. It is obvious that the library administrations in these two cities have succeeded in securing preferential treatment for their institutions.

Pattern 3: cities above average in library expenditures and below average in municipal expenditures and economic ability.—The ten cities in this category are the first which diverge from the pattern of the fifty-one cities which are above or below average on all three financial measures. This is the group in which the library receives preferential treatment. Table 6 lists the cities with their respective index numbers.

The significance of the geographical locations of these cities is not to be underestimated. Eight of the ten are in the Middle West, and the remaining two—Long Beach and Tacoma—are on the Pacific Coast. Apparently it is difficult for cities of below average economic ability and general municipal expenditures in other regions of the country to provide better than average library support. This hypothesis in turn implies that the medium-sized cities in the Middle West are not confronted by as many urgent municipal problems which have first claim upon tax receipts as are cities in New England, the Middle Atlantic

states, and the states of the southeastern and southwestern sections. Moreover, the cities in this group are not large cities. It is only the two Ohio cities of Dayton and Toledo, which receive their library funds from the centrally collected and locally shared tax on intangibles, that have populations in excess of 200,000. The other six middle western and two far western cities have between 100,000 and 175,000 inhabitants. From

TABLE 6*

CITIES ABOVE AVERAGE IN LIBRARY EXPENDITURES, AND BELOW AVERAGE IN MUNICIPAL EXPENDITURES AND ECONOMIC ABILITY, 1937*

City	Library Expenditures	Municipal Expenditures	Economic Ability
Dayton.....	126	77	96
Duluth.....	123	87	97
Flint.....	115	87	87
Fort Wayne.....	121	55	90
Gary.....	120	67	60
Grand Rapids....	125	73	91
Long Beach.....	132	98	88
South Bend.....	133	63	81
Tacoma.....	105	74	81
Toledo.....	161	83	96
Group average..	126	76	87

* Source: Table 3.

an examination of the index numbers for these ten cities it is quite evident that the citizens in each have arrived at the conclusion that an adequately financed library is a social asset to their communities. This conclusion is substantiated by the fact that the library expenditure index numbers in all ten cities far exceed the municipal expenditure numbers, which, generally speaking, should fix close boundaries for the library expenditure numbers.

Another significant fact is that in seven cities the economic ability number is higher than the municipal expenditure number; in Flint the numbers are equal,

and in Gary and Long Beach the municipal expenditure numbers are larger than the economic ability numbers. Seven cities, therefore, are operating their municipal governments more economically, and consequently with a lower tax rate, than their economic ability numbers indicate they could afford; and yet they are supporting their permissive functions, if expenditures for libraries may be considered as representative of permissive functions, in better than average style.

In brief summary, these cities are below average in economic ability and municipal expenditures, but, because they are well governed, and because the special problems confronting larger cities and cities of the East and South are not present here, they are able to provide for their libraries to a better than average degree.

Pattern 4: cities below average in library expenditures and above average in municipal expenditures and economic ability.—

This group of only three cities is the exact opposite of Pattern 3. Chicago, Philadelphia, and Saint Louis—the second, third, and eighth largest cities in the country—make larger than average total municipal expenditures and have greater than average economic ability, but support their libraries more poorly than the average for the ninety-five cities of over 100,000 population. Because seven of the thirteen cities of over 500,000 population are *above* average on all three measures, the reasons for the below average status of the libraries in Chicago, Philadelphia, and Saint Louis call for close examination. Table 7 presents the index numbers for these three cities. From the statistical evidence afforded by these numbers the conclusion must be that the libraries receive far less than their proportionate share of municipal funds. The low rank of Chicago and

Philadelphia in library expenditures is well known;⁹ and the low fixed library tax rate in Saint Louis has long been an obstacle to adequate support. A further investigation, the findings of which are tabulated below, shows that these three cities devote a considerably larger percentage of their revenues to the operation of general government (the legislative, executive, and judicial functions), and to police protection, than do three

TABLE 7*

CITIES BELOW AVERAGE IN LIBRARY EXPENDITURES, AND ABOVE AVERAGE IN MUNICIPAL EXPENDITURES AND ECONOMIC ABILITY, 1937

City	Library Expenditure	Municipal Expenditure	Economic Ability
Chicago.....	73	126	117
Philadelphia.....	56	105	103
Saint Louis.....	90	104	117
Group average..	73	112	112

* Source: Table 3.

cities of similar size which have above average library expenditures.¹⁰ From the general current opinions prevalent today the assumptions may be made, too, that the city administrations of Chicago, Philadelphia, and Saint Louis are definitely inferior to those of Boston, Cleveland, and Washington.

Chicago and Philadelphia have large bonded debts, interest payments on which draw heavily on municipal income, and consequently reduce the amount of funds available for current operating expenditures. These three cit-

⁹ C. B. Joeckel and Leon Carnovsky, *A Metropolitan Library in Action* (Chicago: University of Chicago Press, 1940), pp. 102-5.

¹⁰ New York City is not included here because its index number of 101 for library expenditures is made possible by its income from endowment funds and not from the city appropriation alone.

ies also have suffered more than most of the other cities in their population group from sharply curtailed receipts from the real property tax. The huge tax delinquencies in Chicago,¹¹ Philadelphia, and Saint Louis are well known.

TABLE 8*

COMPARISON OF LARGE CITIES ABOVE AVERAGE IN LIBRARY EXPENDITURES WITH LARGE CITIES BELOW AVERAGE IN LIBRARY EXPENDITURES IN PERCENTAGES SPENT ON GENERAL GOVERNMENT, POLICE, AND LIBRARIES, 1937

City	General Government	Police	Library
Chicago.....	11.7	12.3	0.927
Philadelphia.....	11.8	13.8	0.851
Saint Louis.....	9.5	15.9	1.370
Boston.....	7.3	9.9	1.964
Cleveland.....	8.4	8.6	3.517
Washington.....	4.9	9.8	1.307

* Sources: Tables 20 and 24 of the unpublished dissertation.

In these cities, therefore, special municipal problems which demand excessive outlays for the purely housekeeping and protective aspects of government create conditions which, coupled with high fixed interest charges, combine to cause a situation unfavorable to satisfactory library support. Generally conceded political machine government adds a finishing touch to the unfavorable financial picture.

Pattern 5: cities above average in library expenditures and economic ability and below average in municipal expenditures.—This group of cities creates the general impression that they are economically able cities which provide better than average support for libraries. Expert opinion in the field of municipal govern-

ment would probably agree that the general character of the government in this group of cities is good. The one possible exception to this generalization is Kansas City, Missouri. However, the library in this city receives its income from public school funds and consequently is quite well insulated from sporadic municipally centered political manipulations. The cities which belong in this group are listed in Table 9. Four of the six cities, it will be noted, are in the Middle West.

TABLE 9*

CITIES ABOVE AVERAGE IN LIBRARY EXPENDITURES AND ECONOMIC ABILITY, AND BELOW AVERAGE IN MUNICIPAL EXPENDITURES, 1937

City	Library Expenditures	Municipal Expenditures	Economic Ability
Indianapolis.....	135	94	108
Kansas City (Mo.)	105	97	142
Peoria.....	108	83	104
Saint Paul.....	109	74	104
Spokane.....	108	71	100
Wilmington.....	111	71	121
Group average..	113	82	113

* Source: Table 3.

In Indianapolis and Kansas City, although the library funds come from the school district, the municipal expenditure numbers of 94 and 97 are so close to average (100) that for all practical considerations the cities may be said to be above the average on all three measures.

Peoria, with a population of 105,087, and Saint Paul, with 287,736 inhabitants, are middle western cities which are relatively free from pressing municipal problems and excessive municipal indebtedness. They are fortunate in their ability to keep their tax rates twenty and thirty index numbers lower than theoretical economic ability and still support a permissive function such as the library in

¹¹ Joeckel and Carnovsky, *op. cit.*, pp. 95-97. (A full discussion of the disastrous effects of tax delinquencies on library revenues in Chicago is given here.)

better than average style. These cities could raise expenditures for libraries and recreation quite substantially without greatly increasing the total municipal outlay or the burden on the taxpayers. If this were done, a very superior type of service might be rendered by these agencies.

Spokane, on the West Coast, and Wilmington, in the East, are the two remaining cities in this group. Spokane has an index of 100 for economic ability, 74 for municipal expenditures, and 108 for library expenditures. The low index of total municipal expenditures is particularly notable. In Spokane it would seem readily possible to increase taxes as special supplementary services are introduced, or as emergencies arise, because the potential economic ability of the city is considerably greater than the present tax levels.

The library expenditure index number for Wilmington, in which the library is of the older corporation type, would be considerably lower if only the library appropriation from the city were considered. In Wilmington approximately 22 per cent of the library's income is derived from income on endowment funds. If this additional income were not available, the library expenditure number of 111 would coincide more closely with the municipal expenditure number of 71. An economic ability number of 121 indicates that the city is potentially much more able to finance its municipal government than the present municipal expenditure number indicates. A comparatively low debt burden, \$59 per capita as compared with the average of \$100 for cities in the 100,000 to 300,000 group, enables this city to keep its taxes low, but it may be concluded that if the municipal expenditure number more closely approximated the economic ability num-

ber, the city would supply many more desirable services to its residents.

The fact that the library in Wilmington is not entirely dependent on city funds is probably the reason why the city does not support it more adequately. The library is quite independent of the city government. It is a corporation library and the trustees elect ten corporate board members, but seven ex-officio members represent the municipal government. A series of six contracts with the city definitely fixes the entire income the library receives from municipal funds.¹²

In summary, it is apparent that the cities which comprise this group are relatively well-administered cities, have small funded debts, and have few of the urgent problems which confront the larger cities in the East and South.

Pattern 6: cities below average in library expenditures and economic ability and above average in municipal expenditures.

—The most important observation that can be made concerning the five cities in this group is that, temporarily at least, they appear to be living beyond their means. In Yonkers the index of total municipal expenditures is more than twice as great as the index of economic ability, and the difference is almost as large in Lowell and New Bedford. All the four Atlantic seaboard cities in this group were in the midst of severe industrial depression in 1937. Obviously, the cities in this group have not reduced municipal expenditures to the same extent that their economic ability has declined. The library has suffered much more severely than municipal government in general. In predepression years the eco-

¹² Carleton B. Joeckel, *The Government of the American Public Library* (Chicago: University of Chicago Press, 1935), pp. 91, 98.

conomic ability indices were doubtless much higher.

The library expenditure index for the Enoch Pratt Free Library of Baltimore would be considerably lower than its present number of 92 if only income from the city appropriation were considered. Ten per cent of the library's income comes from interest on endowment funds, and 7 per cent comes from miscellaneous receipts. Thus only 83 per cent of the income comes from city funds.

TABLE 10*
CITIES BELOW AVERAGE IN LIBRARY EXPENDITURES AND ECONOMIC ABILITY, AND ABOVE AVERAGE IN MUNICIPAL EXPENDITURES, 1937

City	Library Expenditures	Municipal Expenditures	Economic Ability
Baltimore.....	92	110	90
Lowell.....	49	121	61
Milwaukee.....	97	149	98
New Bedford.....	97	113	64
Yonkers.....	79	187	84
Group average..	83	136	79

* Source: Table 3.

It is axiomatic that per capita municipal expenditures can be readily increased but that it is an extremely difficult task to reduce expenditures for any municipal functions. The municipal expenditure index numbers in these cities were built up during years of unequalled prosperity, and retrenchment commensurate with economic decline has not been made. Retrenchment is not possible either because citizens cannot easily force expenditures down or because citizens are willing to support government to the same high extent even when they are less able to do so. It is not the purpose of the study to attempt an answer to the question of how large per capita municipal expenditures must be to con-

stitute an onerous economic burden. The obvious fact remains that in the case of these cities and seven others in Pattern 8 the municipal expenditure numbers are much further out of line with the economic ability numbers than in eighty-three of the ninety-five cities studied.

Fundamentally related to the wide difference between above average municipal expenditure index numbers and substantially lower economic ability index numbers is the finding that the library expenditure numbers are also substantially lower than the municipal expenditure numbers. The hypothesis advanced from this finding is that large portions of the municipal income must be allotted to essential functions to maintain a comparatively adequate type of service.

Pattern 7: cities below average in library expenditures and municipal expenditures and above average in economic ability.—An entirely different type of city is represented in this group. The ten cities included seem theoretically able to support their municipal activities to a better than average extent, but the index numbers for municipal expenditures and library expenditures do not corroborate this hypothesis. The ten cities and their index numbers are listed in Table 11. The index numbers in this table include four southern cities which have a lower index number for library expenditures than for general municipal expenditures. No index number for municipal expenditures was available for Charlotte because of lack of data, but it is safe to assume that the library index is lower than the municipal index. This finding concerning southern cities reinforces the hypothesis advanced previously; namely, that in southern cities the library expenditure index is generally appreciably lower than the municipal expenditure index. Sixteen of the eighteen southern cities in-

cluded in the investigation have lower library expenditure indices than municipal expenditure indices. For one city, Charlotte, the municipal expenditure number is lacking, as stated above, but it may be presumed that this number is higher than the library expenditure number of 28. This leaves only one southern city, Memphis,¹³ in which the index number (59) for library expenditures is higher

TABLE 11*

CITIES BELOW AVERAGE IN LIBRARY EXPENDITURES AND MUNICIPAL EXPENDITURES, AND ABOVE AVERAGE IN ECONOMIC ABILITY, 1937

City	Library Expenditures	Municipal Expenditures	Economic Ability
Atlanta.....	47	67	120
Charlotte.....	28	†	102
Dallas.....	39	55	133
Des Moines.....	93	69	112
Nashville.....	40	57	100
Omaha.....	49	64	120
Richmond.....	58	87	109
Tulsa.....	65	61	105
Wichita.....	91	67	103
Youngstown.....	94	82	126
Group average..	60	68	113

* Source: Table 3.

† This item was not available.

than that for municipal expenditures (46). Nevertheless, this city actually conforms to the general pattern for southern libraries because only 75 per cent of the library income is derived from the city of Memphis. Twenty per cent is given to the library to reimburse it for county service and 5 per cent comes from miscellaneous sources. The conclusion of this analysis of southern cities, therefore, is that the library expenditure index is uniformly lower than the municipal expenditure index and, furthermore, that in all but one city, New Orleans,¹⁴ the

municipal expenditure index is also lower than the economic ability index.

This finding is reversed in the cases of four of the five remaining cities in Table 11. Des Moines, Tulsa, Wichita, and Youngstown have larger library expenditure indices than municipal indices. Omaha, on the contrary, follows the pattern of the southern cities. Local conditions in this city evidently must be investigated to afford any valid explanation of its low library index. Youngstown probably has a larger library index because it receives its appropriation from the centrally collected, locally shared intangibles tax and is not dependent upon an appropriation from the city of Youngstown.

The best hypothesis for the library expenditure index numbers being larger than the municipal expenditure index numbers in Des Moines, Tulsa, and Wichita is that these cities have no heavy demands upon the essential functions of government and therefore are able to allot a larger percentage of the budget to a permissive function, the library. In cities where total per capita municipal operating expenditures are below average, it is necessary to allot a larger percentage of the total to the library than in cities with above average total per capita municipal expenditures, if the library is to receive the average per capita library income of \$0.64.

Pattern 8: cities above average in library expenditures and municipal expenditures and below average in economic ability.—Like the cities in Pattern 6 (cities below average in library expenditures and economic ability and above average in municipal support), the ten cities in this group appear to be currently spending more than their economic ability warrants. Also like the cities in Pattern 6, they are generally located in the same

¹³ See Table 5.

¹⁴ See Table 5.

geographical region. In Pattern 6, four of the five cities were on the East Coast. Here nine of the ten cities are in the same section of the country. But Table 12 shows one essential difference from Table 10. These cities, which have higher than average municipal expenditure index numbers, also (and this is the difference) have considerably higher than average index numbers for library expenditures.

Detroit is the only midwestern city in this group. There are no representatives from the South, the Southwest, the Mountain states, or the Far West in the group. None of the libraries in this pattern have attained their higher than average position because of additional funds received as income from endowment funds. Their supplementary funds, if any, are derived from fines, fees, and rental collections. Detroit in 1937 received a small grant (4 per cent of the total) from the state of Michigan.

Generally considered, these libraries are financed about as well as the general municipal operating income of the city permits. In four cities the library expenditure index is higher than the municipal expenditure index, and in six the opposite condition exists. In other words, a permissive function of government, usually one of the last to be considered when appropriations are made, has in these cities been financed so adequately that they are above average in library income. The broad conclusion which may be drawn is that the total per capita municipal expenditure amount has been set at a sum high enough to provide adequately for both the essential and the permissive functions of government.

Just how great a hardship is inflicted upon taxpayers in cities where the municipal expenditure index number is substantially higher than the economic abil-

ity index number is beyond the scope of the present investigation. All these cities are highly industrialized, and their indices of economic ability may have been only temporarily reduced in 1937. If the municipal expenditure indices can be maintained at their above average level, while economic ability remains below average in these cities, there will be convincing proof that taxpayers are content

TABLE 12*

CITIES ABOVE AVERAGE IN LIBRARY EXPENDITURES AND MUNICIPAL EXPENDITURES, AND BELOW AVERAGE IN ECONOMIC ABILITY, 1937

City	Library Expenditures	Municipal Expenditures	Economic Ability
Bridgeport.....	162	111	90
Buffalo.....	138	171	98
Detroit.....	116	128	92
Elizabeth.....	125	100	87
Jersey City.....	137	187	80
Lynn.....	128	133	89
Somerville.....	138	142	75
Trenton.....	123	100	88
Utica.....	128	121	90
Worcester.....	148	157	95
Group average..	134	135	88

* Source: Table 3.

to support generously the functions which they consider essential and desirable to their physical and mental well-being even though they have fewer dollars left in their pockets.

CONCLUSION

Two major purposes have been undertaken in this study: (1) to determine statistically the relationships (a) between theoretical economic ability and actual total municipal operating expenditures and (b) between theoretical economic ability and library expenditures; and (2) when these relationships have been established, to determine the various

groups into which the individual cities resolve themselves.

The first finding is a coefficient of $+.348$ between economic ability and total municipal expenditures. In other words, there appears to be a slight tendency for higher municipal expenditures and greater economic ability to accompany each other.

The second finding is a coefficient of $+.378$ between economic ability and library expenditures, showing substantially the same correlation between library expenditures and economic ability as between total municipal expenditures and economic ability.

Third, although the above correlations are positive and significant, they are not as high as the coefficient of correlation between library expenditures and municipal expenditures, which was found to be $+.669$. From the point of view of possible prediction, therefore, the level of per capita total municipal expenditures is likely to be a surer indication of library expenditures than the theoretical measure of economic ability.

It is believed that the coefficients discovered in the study represent accurately the findings for the ninety-five cities investigated *as a group*. These findings should not be construed as accurate predictions which apply infallibly to every individual city. Numerous exceptions and direct reversals of the general trends have been discovered.

The individual positions of the ninety-five cities were next investigated. Fifty-one cities were found to be either above or below the average in all three measures, twenty-three being above and twenty-eight below. The remaining forty-four cities resolve themselves into the six divergent patterns described above.

From these two conforming and six diverging patterns of cities Table 13 has been constructed to present the status of the ninety-five cities by broad geographical sections of the country. The six regions listed by Odum¹⁵ have been used in the tabulation, but Odum's Northeast region has been divided into two regions (New England and the Middle Atlantic states) because the positions of the cities in these sections vary widely in all three measures of library expenditures, municipal expenditures, and economic ability.

The table reveals the essential findings regarding the ninety-five cities when they are grouped according to their geographical regions. A general statement for each of the seven regions is made in the following paragraphs.

1. *New England*.—The great majority of the cities of over 100,000 population in New England are above average in library expenditures and municipal expenditures, but only half of these cities rank above average in economic ability. In general, the citizens of these New England cities are exerting greater than average effort to maintain the high position which their libraries have held for many years. Library expenditures have held closely to the general level of total municipal expenditures.

2. *Middle Atlantic*.—Two-thirds of the Middle Atlantic cities are above average on all three financial measures. Only one-third of these cities are below average in economic ability, as compared with half the cities in New England. From this analysis it is shown that the economic ability of the cities, chiefly in New York, New Jersey, and Pennsyl-

¹⁵ H. W. Odum, *Southern Regions of the United States* (Chapel Hill: University of North Carolina Press, 1936), p. 6.

vania, has been better maintained than that of the cities in Massachusetts, Connecticut, and Rhode Island. It is quite likely that this fact has resulted because the industries in the Middle Atlantic cities are much more diversified than they are in New England.

3. *Southeast*.—The fourteen cities in the Southeast are all below average in municipal expenditures and in library

ing findings of this study is that in about two-thirds of the twenty-five cities of the Middle West, library expenditures are definitely in a better relative position than either total municipal expenditures or economic ability. Sixteen of the twenty-five cities are above average in library expenditures, but sixteen are below average both in municipal expenditures and in economic ability. Condi-

TABLE 13*

POSITION OF THE NINETY-FIVE CITIES OVER 100,000 POPULATION IN THE MEASURES OF LIBRARY EXPENDITURES, MUNICIPAL EXPENDITURES, AND ECONOMIC ABILITY, 1937

(Arranged by Region)

GEOGRAPHICAL REGION	NUMBER OF CITIES	ABOVE AVERAGE			BELOW AVERAGE		
		Library Expenditure	Municipal Expenditure	Economic Ability	Library Expenditure	Municipal Expenditure	Economic Ability
New England.....	13	10	12	6	3	1	7
Middle Atlantic.....	21	13	14	14	8	7	7
Southeast.....	14	0	0	4	14	14	10
Southwest.....	6	0	0	2	6	6	4
Middle West.....	25	16	9	9	9	16	16
Northwest.....	6	1	1	3	5	5	3
Far West.....	10	9	6	7	1	4	3
Total.....	95	49	42	45	46	53	50

* Source: Table 3.

expenditures. Four cities, however, are above the average in economic ability. The hypothesis is advanced that these four cities have just recently attained this favorable economic position and that the municipal tax systems cannot catch up or have not yet caught up with rapid changes in the economic ability of the cities.

4. *Southwest*.—The pattern in the Southwest is similar to that in the Southeast. All six cities in the Southwest are below average in municipal expenditures and library expenditures and two-thirds of them are also below average in economic ability.

5. *Middle West*.—One of the interest-

tions for relatively liberal library financing seem favorable for all but the larger cities in this section in spite of below average economic ability and municipal expenditures. The absence in these cities of the pressing problems which affect the essential functions of municipal government in cities in the East and South may very likely make this favorable situation for libraries possible.

6. *Northwest*.—Five of the six cities in the Northwest are below average in municipal expenditures and library expenditures. Three cities are above and three below average in economic ability. The cities in this part of the country illustrate excellently the finding presented earlier,

namely, that library expenditures are in closer accord with actual total municipal operating expenditures than with theoretical economic ability.

7. *Far West*.—Of the ten cities on the Pacific Coast nine rank above average in library expenditures. This is a better average than that shown by any other region. This fact is all the more striking because only six cities are above average

in municipal expenditures and only seven above average in economic ability. Evidently these cities are able to operate their essential functions satisfactorily on relatively low total incomes. Here again, as in the Middle West, the absence of heavy demands for essential municipal services releases funds for the maintenance of libraries, recreational agencies, and schools.

